

In the Claims:

Please replace claims 7 and 8 with the following amended claims:

7. (amended) The isolated protein of claim 1, wherein said portion is selected from the group consisting of residues 93-157, residues 203-286, residues 299-351, and residues 412-548.

8. (amended) An isolated polypeptide comprising at least 15 contiguous amino acid residues of SEQ ID NO:2, wherein the at least 15 contiguous amino acid residues comprise residues 117-122, 525-530, 283-288, or 50-55 of SEQ ID NO:2, and wherein the at least 15 contiguous amino acid residues are immunogenic.

REMARKS

Reconsideration of the application in view of the above amendments and following remarks is requested. Claims 1-8, 23, 24, and 26 are now in the case. Claims 7 and 8 and the specification have been amended. No new matter has been added.

Copies of the amended claims and paragraph, marked to show changes, are included in the attached Appendix.

The drawings have been objected to. A corrected Fig. 2, with sheets numbered separately, is being submitted to the Official Draftsperson. The specification has been amended to reflect the separate numbering of the sheets of Fig. 2.

Claim 8 was rejected under 35 U.S.C. § 112, first paragraph. The Office believes that the claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Applicants have amended claim 8 to clarify that the at least 15 contiguous amino acid residues of SEQ ID NO:2 are immunogenic. The recited regions of SEQ ID NO:2 have been identified as hydrophilic (specification at page 33, lines 33-36 and Fig. 2). One of ordinary skill in the art would recognize that such regions of the zku6 protein would be useful as immunogens. As disclosed in the specification at, for example, page 33, lines 32, immunogenic polypeptides can be prepared as fusion proteins or can be otherwise linked to a protein carrier such as keyhole limpet hemocyanin or bovine serum albumin. In view of this amendment, the Office's concerns regarding protein function are believed to be moot.


Claim 8 was also rejected under 35 U.S.C. § 112, first paragraph because the Office believes that the specification does not reasonably provide enablement for any polypeptide of any function comprising a fragment of SEQ ID NO:2 as recited in the

claim. Applicants believe that this rejection has been overcome by the amendment of claim 8.

The Office objected to claim 7 as being a substantial duplicate of claim 1. Applicants do not agree with the Office's characterization of claim scope because claim 7 does not recite residues 33-75. Nonetheless, in order to clarify claim 7 and advance this application to allowance, claim 7 has been amended to depend from claim 1. No change in scope is intended.

Applicants believe that each rejection and objection has been addressed and overcome. Reconsideration of the application and its allowance are requested. If for any reason the Examiner feels that a telephone conference would expedite prosecution of the application, the Examiner is invited to telephone the undersigned at (206) 442-6673.

Respectfully Submitted,



Gary E. Parker  
Registration No. 31,648

Enclosures:

Appendix  
Amendment Fee Transmittal (in duplicate)  
Postcard

Gary E. Parker  
ZymoGenetics, Inc.  
1201 Eastlake Avenue East  
Seattle, WA 98102  
Tel. (206)442-6673  
Fax (206)442-6678



COPY OF PAPERS  
ORIGINALLY FILED

RECEIVED

Applicants: Darrell C. Conklin, Zeren Gao  
Serial No.: 09/819,136

JUN 27 2002

TECH CENTER 1600/2900

Appendix

Please replace the paragraph at page 4, lines 24-29 with the following amended paragraph:

Within the drawings, Fig. 1 is an alignment of domains E and F of the protein shown in SEQ ID NO:2 with the Kunitz domain of human alpha 3 type VI collagen ("1KNT"; SEQ ID NO:3). [Fig. 2 is] Figs. 2A-2J are a Hopp/Woods hydrophilicity profile of the amino acid sequence shown in SEQ ID NO:2. The profile is based on a sliding six-residue window. Buried G, S, and T residues and exposed H, Y, and W residues were ignored. These residues are indicated in the figure by lower case letters.

Please replace claims 7 and 8 with the following amended claims:

7. (amended) [An] The isolated protein [comprising a portion of SEQ ID NO:2] of claim 1, wherein said portion is selected from the group consisting of residues 93-157, residues 203-286, residues 299-351, and residues 412-548.

8. (amended) An isolated polypeptide comprising at least 15 contiguous amino acid residues of SEQ ID NO:2, wherein the at least 15 contiguous amino acid residues comprise residues 117-122, 525-530, 283-288, or 50-55 of SEQ ID NO:2, and wherein the at least 15 contiguous amino acid residues are immunogenic.